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EXAMINER

YUN, EUGENE

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/383,481
Filing Date: August 26, 1999
Appellant(s): RIMPELA ET AL.

Geza Ziegler
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/11/2006 appealing from the Office
action mailed 8/9/2005

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,995,496	HONKASALO	11-1999
5,673,266	LI	9-1997

6,157,616	WHITEHEAD	12-2000
6,359,904	HAMALAINEN	3-2002
6,031,832	TURINA	2-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo et al. (US 5,995,496) in view of Li (US 5,673,266) and Whitehead (US 6,157,616).

Referring to Claim 1, Honkasalo teaches a method for controlling the operation of a mobile station in a packet switched communication network based on a cellular network, which communication network is arranged to transfer information using downlink or uplink data transmission between a base station and at least one mobile station by means of a radio channel, comprising the step of:

using a transmission power on a set level on the radio channel to transfer information (see ABSTRACT).

Honkasalo does not teach transmitting information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station on the radio channel, and wherein one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block of the downlink data transmission to be transmitted subsequently. Li teaches transmitting information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station on the radio channel (see col. 2, lines 25-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Li to said method of Honkasalo in order to reduce processing load by the mobile station upon receiving the information.

The combination of Honkasalo and Li does not teach one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block of the downlink data transmission to be transmitted subsequently. Whitehead teaches one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block of the downlink data transmission to be transmitted subsequently (see col. 7, lines 59-67 and col. 8, lines 1-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Whitehead to said method of Honkasalo in order simplify the system by reducing memory use.

Referring to Claim 8, Honkasalo teaches a communication system for implementing packet switched data transmission based on a cellular network, which

communication system is arranged to transmit information using downlink or uplink data transmission between a base station and at least one mobile station by means of a radio channel, comprising:

means for arranging data transmission on the radio channel to take place with a transmission power on a set level (see ABSTRACT).

Honkasalo does not teach means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station, and means for also arranging the communication system to transmit one of said blocks containing information on the transmission power level of said one block or another block to be transmitted subsequently. Li teaches means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the mobile station (see col. 2, lines 25-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Li to said method of Honkasalo in order to reduce processing load by the mobile station upon receiving the information.

The combination of Honkasalo and Li does not teach one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block to be transmitted subsequently. Whitehead teaches one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block to be transmitted subsequently (see col. 7, lines 59-67 and col. 8, lines 1-11). Therefore, it would have been obvious to one

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of ordinary skill in the art at the time the invention was made to provide the teachings of Whitehead to said method of Honkasalo in order simplify the system by reducing memory use.

Referring to Claim 9, Honkasalo teaches a wireless communication device, arranged to function in a communication system, which communication system is arranged to implement packet switched data transmission based on a cellular network, and which communication system is arranged to transmit information using downlink or uplink data transmission between a base station and said wireless communication device by means of a radio channel, comprising:

means for arranging data transmission on the radio channel to take place with a transmission power on a set level (see ABSTRACT).

Honkasalo does not teach means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the wireless communication device, and means in the wireless communication device arranged to receive one of said blocks transmitted by the base station on the radio channel, which one block contains information on the transmission power level of said one block or another block to be transmitted subsequently. Li teaches means for arranging the radio channel to transmit information that is divided into successive blocks of the downlink data transmission from the base station to the wireless communication device (see col. 2, lines 25-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Li

to said method of Honkasalo in order to reduce processing load by the mobile station upon receiving the information.

The combination of Honkasalo and Li does not teach one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block to be transmitted subsequently. Whitehead teaches one of said blocks comprises information on the transmission power level of said one block of the downlink data transmission or another block to be transmitted subsequently (see col. 7, lines 59-67 and col. 8, lines 1-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Whitehead to said method of Honkasalo in order simplify the system by reducing memory use.

Referring to Claim 2, Whitehead also teaches said one block comprising information on the transmission power level of another block to be transmitted next (see col. 7, lines 59-67 and col. 8, lines 1-11).

Referring to Claim 3, Honkasalo also teaches said one block comprising information on the transmission power level of said one block (see col. 8, lines 1-4).

Referring to Claim 6, Honkasalo also teaches said transmission power level indicated as a difference with respect to a known reference level (see col. 8, lines 25-32).

Referring to Claim 7, Honkasalo also teaches said known reference level as a BCCH channel according to the GPRS system (see col. 6, lines 40-53).

Referring to Claim 13, the combination of Honkasalo, Whitehead and Li does not teach the mobile station using the transmission power level information to determine if a change in a received signal is caused by the base station or an environmental change. Whitehead teaches the mobile station using the transmission power level information to determine if a change in a received signal is caused by the base station or an environmental change (see col. 6, lines 26-29 and lines 41-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Whitehead to said communications network of Honkasalo in order to reduce error in measurements so proper adjustments to equipment can be made.

Referring to Claim 14, Whitehead also teaches using the transmission power level information to adjust at least one parameter in the mobile station (see col. 6, lines 26-37).

Referring to Claim 15, Whitehead also teaches the parameter as timing, frequency, or amplification (see col. 6, lines 55-56).

Referring to Claim 16, Whitehead also teaches using the transmission power level information to adjust a reception level in the mobile station to a correct range (see col. 6, lines 26-29).

Referring to Claim 17, Whitehead also teaches adding the information on the transmission power level to the block when the block is transmitted (see col. 7, lines 59-67 and col. 8, lines 1-11).

Referring to Claim 18, Whitehead also teaches the information on the transmission power level determined on a transmission end of the radio channel (see fig. 6 and see col. 7, lines 59-67 and col. 8, lines 1-11).

Referring to Claim 19, Whitehead also teaches the information on the transmission power level is the transmission power level at the transmitting end of the radio channel (see col. 7, lines 59-67 and col. 8, lines 1-11).

Referring to Claim 20, Whitehead also teaches the one of said blocks including information on the transmission power level at the transmitting end of the radio channel (see col. 7, lines 59-67 and col. 8, lines 1-11).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo, Whitehead and Li in view of Hamalainen et al. (US 6,359,904).

Honkasalo teaches an RLC block according to the GPRS system used as said one block (see col. 11, lines 18-20). The combination of Honkasalo, Whitehead and Li does not teach the information on the transmission power level transmitted by means of an MAC header in the RLC block. Hamalainen teaches the information on the transmission power level transmitted by means of an MAC header in the RLC block (see col. 3, lines 65-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hamalainen to said communications network of Honkasalo in order to reduce the use of too high power levels in a mobile station.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo, Li, Whitehead, and Hamalainen as applied to claim 1 above, and further in view of Turina (US 6,031,832).

Hamalainen teaches said transmissions power level indicated by means of bits contained in an octet of said MAC header (see col. 9, lines 23-38). The combination of Honkasalo, Li, Suzuki, and Hamalainen does not teach at least some of the bits being arranged for a TFI field in a way known as such. Turina teaches at least some of the bits being arranged for a TFI field in a way known as such (see col. 7, lines 48-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hamalainen to said communications network of Honkasalo in order to reduce the use of too high power levels in a mobile station.

(10) Response to Argument

(A) In claims 1, 8, and 9, the appellant argued that the combination of Honkasalo, Li, and Whitehead does not teach that one of the blocks comprises information on the transmission power level of the one block of the downlink data transmission or another block on the downlink data transmission to be transmitted subsequently.

In Response to (A) The examiner referred to the Whitehead reference to read on the above limitation. The examiner would like to state that the limitation states that “**one** of the blocks comprises **information** on the transmission power level of the **one block** of the downlink data transmission **or** another block on the downlink data

transmission to be transmitted subsequently". The limitation does not state which block the "one" block comprises information of. Therefore, it can be concluded that the one block can contain information of the transmission power of its own block, since the limitation does not indicate otherwise. Therefore, the cited passage of Whitehead (col. 7, lines 59-67 and col. 8, lines 1-11) teaches the above limitation since the passage teaches a transmitted packet which has a transmit power level encoded into it. The examiner does not have to address the another block transmitted subsequently since the limitation stated that the one block comprises information of the said one block or another block to be transmitted subsequently. In addition, none of the references need to teach the actual power level of any block, because the limitation states that the one block comprises **information** on the transmission power level of the one block. That does not necessarily mean that the block must comprise the actual power level. The "information" is not clearly defined in the limitation which means that the one block can contain any kind of information of the transmit power level of the block, including that the one block simply has a power level.

(B) The appellant argued that there is no motivation to combine the Honkasalo, Li, and Whitehead references.

In Response to (B) The Honkasalo, Li, and Whitehead references are believed by the examiner to be combinable. Firstly, all three references teach transmit power control in a wireless communications system (Noted in the title of the Honkasalo reference). The Li reference was combined with the Honkasalo reference simply to show that the act of transmitting information that is divided into successive blocks of the

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downlink data transmission from the base station to the mobile station (see col. 2, lines 25-31). However, the Li reference also teaches transmit power control in a wireless system (col. 3, lines 3-21) and in addition to what is stated in the above rejection, the combination of the Honkasalo and Li reference would also benefit by reducing power consumption. The Whitehead reference was then also combined in order to address what was stated in (A). The Whitehead reference also teaches transmit power control in a wireless system (col. 7, lines 59-67 and col. 8, lines 1-11) and the appellants argument that the Whitehead is a WLAN reference and cannot be combined with the Honkasalo and Li references due to the claims teaching a cellular system is incorrect. The Whitehead reference does in fact teach a cellular system (col. 1, lines 23-25). Therefore, the appellants argument in this case is incorrect. Nevertheless, the examiner has proved that all 3 references teach transmit power control in a wireless communications system and are therefore, combinable.

(C) The appellant argued that the Whitehead reference teaches a carrier power level, which is different than the block power level.

In Response to (C), the examiner reiterates that the limitation states that “**one** of the blocks comprises **information** on the transmission power level of the **one block** of the downlink data transmission...”. The claims do not specifically state whether the “information” is the carrier power level or the actual power level. Therefore, it does not make a difference whether or not the Whitehead reference teaches the one block comprising the actual power level, because the claims do not state that.

(D) The appellant argues that in claim 2, the cited references do not teach the one block comprising information on the transmission power level of another block to be transmitted next.

In Response to (D), the claim states that the one block comprises **information** on the transmission power level of another block to be transmitted next. Once again, there is no detail on the kind of information the block has. Therefore, the examiner is left wide open on how to define the “information” which can include simply that there is an incoming block with a transmission power. The “information”, as broadly defined is still believed by the examiner to be taught in the Whitehead reference (see col. 7, line 59 to col. 8, line 11 as well as col. 3, lines 19-24).

(E) The appellant argues that in claim 3, the cited references do not teach the one block comprising information on the transmission power level of the one block.

In Response to (E), the limitation in claim 3 is very similar to the limitation in **(A)**. Therefore, the response to **(A)** also applies to the response to **(E)**.

(F) The appellant argues that in claim 6, the cited references do not teach the transmission power level indicated as a difference with respect to a known reference level.

In Response to (F), the claim does not state that the information sent is actually the difference between the power level and the reference level. The claim only states that the transmission power level is indicated as a difference between the power level and a reference level. This does not rule out the fact that the receiving station can

calculate the difference after the transmission power level is sent, which the Honkasalo reference clearly teaches.

(G) The appellant argues that in claim 13, the cited references do not teach using the transmission power level information to determine if a change in a received signal is caused by the base station or an environmental change.

In Response to (G), col. 6, lines 26-29 state that the parameters are configured in order to optimize the transmitted to its environment. Therefore, the parameters already determine that the change in the received signal is caused by environmental change. There is nothing in the claims that state that the transmission power level information cannot determine that the received signal is caused by environmental change every time.

(H) The appellant argues that in claim 16, the cited references do not teach using the transmission power level information to adjust a reception level in the mobile station to a correct range.

In Response to (H), firstly, "optimizing the transmitter to its environment" usually causes the adjustment of a reception level in a mobile station to a correct range. Secondly, the Whitehead reference does concern mobile stations. Nowhere in the reference does it state that the transmitters and receivers are fixed. Also, the Whitehead reference states that the reference solves the complications of mobility in a wireless packet network.

(I) The appellant argued that in claim 17, the cited references do not teach adding the information on the transmission power level to the block when the block is transmitted.

In Response to (I), the limitation in claim 17 is also similar to the limitation in **(A)**. Therefore, the response to **(A)** also applies to the response to **(I)**. However, the only difference is the act of "adding the information on the transmitting power to the block...". However, the term "information" is still not specifically defined, so the cited passage in Whitehead also teaches the above limitation.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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